

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1117	(power converter same (central or center))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 13:57
L2	163	(solar or photovoltaic)and(power converter same (central or center))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 14:00
L3	18	(solar or photovoltaic)same(power converter same (central or center))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 14:15
L4	0	(solar power generation)same(power converter same (central or center))	JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 14:16
L5	0	(solar array)same(power converter same (central or center))	JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 14:16
L6	0	(solar battery)same(power converter same (central or center))	JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 14:16
L7	0	(solar module)same(power converter same (central or center))	JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 14:16
L8	4	(solar cell)same(power converter same (central or center))	JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 14:21
L9	2	(solar cell)same(power converter same (position))	JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 14:29
L10	1	("6184457").PN.	US-PGPUB; USPAT	OR	OFF	2007/03/21 14:41
L11	1	("5951785").PN.	US-PGPUB; USPAT	OR	OFF	2007/03/21 14:44
L12	1	("6207896").PN.	US-PGPUB; USPAT	OR	OFF	2007/03/21 15:05

## EAST Search History

L13	1	("5520747").PN.	US-PGPUB; USPAT	OR	OFF	2007/03/21 15:40
L14	1	("20020195136").PN.	US-PGPUB; USPAT	OR	OFF	2007/03/21 15:40
S1	99	(solar adj(cell or module) or photovoltaic or photoelectric)same (power adj converters)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/21 08:27
S2	30	(solar adj(cell or module) or photovoltaic or photoelectric) near5 (power adj converters)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/20 09:08
S3	1	(Hiroshi ADJ Kondo).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/20 09:09
S4	0	(H ADJ Kondo).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/20 09:09
S5	76302	(Kondo).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/20 09:09
S6	2197	(Kondo).IN. and Canon.AS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/20 11:00

## EAST Search History

S7	706	(Toyomura).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/20 09:13
S8	42	((Solar or Photovoltaic) ADJ (cell or module))same ((power or DC-DC)adj converters)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/20 11:23
S9	1	(PHOTOVOLTAIC POWER GENERATOR AND IT CONTROL METHOD).TI.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/20 11:24
S10	95	(PHOTOVOLTAIC POWER GENERATOR).TI.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/20 11:24
S11	9	((PHOTOVOLTAIC POWER GENERATOR).TI.)and (kondo.IN.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/20 15:34
S12	2	US-20020038667-A1.DID.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/20 15:16
S13	1	("6838611").PN.	US-PGPUB; USPAT	OR	OFF	2007/03/20 15:16
S14	1	"20020038667"	EPO; JPO; DERWENT	ADJ	OFF	2007/03/20 15:35
S15	1	("20020038667").PN.	US-PGPUB; USPAT	OR	OFF	2007/03/20 15:35
S16	1	"20020038667"	EPO; JPO; DERWENT	ADJ	ON	2007/03/20 17:08

## EAST Search History

S17	0	((pn-junction or pin-junction) same solar cell)near5 power converter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/20 17:09
S18	0	((pn-junction or pin-junction) near4 solar cell)same (power converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/20 17:09
S19	41	((pn-junction or pin-junction) near4 solar cell)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/20 17:10
S20	1888	307/64.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/20 17:11
S21	134	307/45.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/20 17:11
S22	363	136/293.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/20 17:11
S23	173	(solar battery) and (pn junction)	US-PGPUB; USPAT	ADJ	ON	2007/03/20 17:27
S24	0	"136".ccls. and (pn junction)	US-PGPUB; USPAT	ADJ	ON	2007/03/20 17:28
S25	0	"136/45".ccls. and (pn junction)	US-PGPUB; USPAT	ADJ	ON	2007/03/20 17:28
S26	0	"136/45".ccls. and pn	US-PGPUB; USPAT	ADJ	ON	2007/03/20 17:28

## EAST Search History

S27	32	136/293.ccls. and pn	US-PGPUB; USPAT	ADJ	ON	2007/03/20 17:29
S28	14	136/293.ccls. and (pn junctions same layers)	US-PGPUB; USPAT	ADJ	ON	2007/03/20 17:30
S29	216	(solar adj(cell or module) or photovoltaic)same (pn junctions)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/21 08:32
S30	7339	(solar adj(cell or module) or photovoltaic)same (pn junctions or layers)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2007/03/21 08:33
S31	1429	(solar adj(cell or module) or photovoltaic)same (pn(junctions or layers))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 08:36
S32	21	136/243.ccls. and (pn (junctions or layers))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 08:42
S33	12	136/243.ccls. and ((photovoltaic layers or solar)same ((pn or pin)junctions))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 08:44
S34	362	(solar battery) and ((photovoltaic layers or solar)same ((pn or pin)junctions))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 08:44

## EAST Search History

S35	73	(solar battery) and ((photovoltaic layers or solar)same ((pn or pin)junctions))and (loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 08:45
S36	333	(power) and ((photovoltaic layers or solar)same ((pn or pin)junctions))and (loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 08:46
S37	10	(power (converter or conditioner)) and ((photovoltaic layers or solar)same ((pn or pin)junctions))and (loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 09:00
S38	2	(power (converter or conditioner)) and ((photovoltaic layers or solar)same(pn or pin))and (solar cell power generation)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 09:06
S39	20	((photovoltaic layers or solar)same(pn or pin))and (solar cell power generation)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 09:10
S40	11	((photovoltaic layers or solar)same(pn or pin)and tandem)and (solar cell power generation)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 09:31
S41	0	(power (coverter or conversion or conditioner))same(solar cell power generation)and (plurality near2 (solar or photovoltaic))and (loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 09:36

## EAST Search History

S42	2	(power (coverter or conversion or conditioner))same(solar cell power generation)and (plurality near2 (solar or photovoltaic))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 09:54
S43	0	(power (coverter or conversion or conditioner))same(plurality and (solar or photovoltaic)position)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 09:55
S44	123	(plurality and (solar or photovoltaic))and(power (coverter or conversion or conditioner)same (loss))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:13
S45	0	(plurality and (((solar or photovoltaic)ADJ elements)arrange))same(power(coverter or conversion or conditioner)same (loss))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:19
S46	0	(plurality and ((solar or photovoltaic)ADJ elements))same(power(coverter or conversion or conditioner)same (plane))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:20
S47	0	((solar or photovoltaic)ADJ elements)same(power(coverter or conversion or conditioner)same (center or central))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:22
S48	0	((solar or photovoltaic)ADJ elements)same(power(coverter or conversion or conditioner)and(center or central))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:22

## EAST Search History

S49	408	((solar or photovoltaic)same(power(coverter or conversion or conditioner))and(center or central))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:25
S50	408	((solar or photovoltaic)same(power ADJ(coverter or conversion or conditioner)))and(center or central)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:26
S51	47	((solar or photovoltaic)same(power ADJ(coverter or conversion adj unit or conditioner)))and(wiring)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:31
S52	0	((solar or photovoltaic)battery)same(power ADJ(coverter or conversion adj unit or conditioner)))and(minimizing losses)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:32
S53	0	((solar or photovoltaic)battery)same(power ADJ(coverter or conversion adj unit or conditioner)))and(minimize loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:32
S54	2	((solar or photovoltaic))same(power ADJ(coverter or conversion adj unit or conditioner)))and(minimize loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:33
S55	0	((solar or photovoltaic))same(power ADJ(coverter or conversion adj unit or conditioner)))same(minimize loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:33

## EAST Search History

S56	1	(power ADJ(coverter or conversion adj unit or conditioner))same(minimize loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:34
S57	0	(solar power ADJ(coverter or conversion adj unit or conditioner))same(minimize loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:35
S58	1	((solar or photovoltaic) battery)same(minimize loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:35
S59	0	((solar or photovoltaic) battery)same(minimize or loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:35
S60	386	((solar or photovoltaic) battery)same(minimize or loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:15
S61	407	((solar or photovoltaic)same(power (converter or conditioner or conversion unit)))and(minimize or loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:46
S62	15	((solar or photovoltaic)same(power (converter or conditioner or conversion unit)))and(minimize adj loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 10:53

## EAST Search History

S63	1	(photovoltaic power generation) same (minimize loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:00
S64	0	((photovoltaic or solar)battery) same ((power converter)and(minimize loss)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:01
S65	2787	((solar or photovoltaic)same power)same(minimize or loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:18
S66	0	(minimize the sum collection losses) same (solar or photovoltaic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:19
S67	0	(minimize sum collection losses) same (solar or photovoltaic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:20
S68	0	(minimize sum collection losses) same (solar )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:20
S69	0	(minimize sum collection losses) and (solar )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:20

## EAST Search History

S70	0	(minimize sum losses) and (solar )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:21
S71	0	(minimizing sum losses) and (solar )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:21
S72	0	(minimizing losses) and (solar )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:21
S73	125	(minimizing losses) and (solar )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/03/21 11:21